# DOCKET NO. 201803US-0 DIV

### IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF: :

NOBUYUKI ISE ET AL :

SERIAL NO. NEW APPLICATION : ATTENTION: APPLICATION BRANCH

FILED: HEREWITH :

FOR: TREPONEMA PALLIDUM FUSED

ANTIGEN AND ASSAY FOR ANTI-TREPONEMA PALLIDUM ANTIBODIES USING THE SAME FUSED ANTIGEN

# PRELIMINARY AMENDMENT

ASSISTANT COMMISSIONER FOR PATENTS WASHINGTON, D.C. 20231

SIR:

Prior to examination on the merits, please amend this application as follows.

# IN THE CLAIMS

Please cancel Claims 1-9 without prejudice.

Please add the following new Claims:

-- 19. The assay for anti-*Treponema pallidum* anti-bodies as claimed in Claim 10, wherein said fused antigen consists essentially of a plurality of surface antigens of *Treponema pallidum*, wherein said surface antigens include at least one antigen selected from the group consisting of 15-kilodalton surface antigen of *Treponema pallidum*, 17-kilodalton

surface antigen of *Treponema pallidum*, and 47-kilodalton suface antigen of *Treponema pallidum*.

- 20. The assay for anti-*Treponema pallidum* antibodies as claimed in Claim 19, wherein said fused antigen consists of three amino acid sequences which are 15-kilodalton surface antigen of *Treponema pallidum*, 17-kilodalton surface antigen of *Treponema pallidum*, and 47-kilodalton surface antigen of *Treponema pallidum*.
- 21. The assay for anti-*Treponema pallidum* antibodies as claimed in Claim 19, wherein said fused antigen includes at least two surface antigens selected from the group consisting of 15-kilodalton surface antigen of *Treponema pallidum* being the same or different.
- 22. The assay for anti-*Treponema pallidum* antibodies as claimed in Claim 19, wherein said fused antigen consists of a plurality of surface antigens of *Treponema pallidum*, wherein said surface antigens include at least one antigen selected from the group consisting of 15-kilodalton surface antigen of *Treponema pallidum*, 17-kilodalton surface antigen of *Treponema pallidum*, and 47-kilodalton surface antigen of *Treponema pallidum*.--

#### REMARKS

Claims 1-9 have been canceled. New Claims 19-22 have been added. Hence, Claims 10-22 are now active in this case.

Applicants have amended the Claims to clarify the present invention. All of the newly added Claims are supported by the disclosed and claims as originally filed. No new matter has been added.

Accordingly, it is believed that the present application is now in condition for examination on the merits. Favorable consideration is earnestly solicited.

Respectfully submitted,

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